# **BBNA Tribal Energy Efficiency & Conservation Block Grant Program**

**Administered by Alaska Building Science Network** 

# **Koliganek Final Report**







#### **Community Summary**

One (1) community building owned by the New Koliganek Village Council received energy efficient weatherization and heating upgrades:

**Community Building** 

Retrofits Completed: August 2012

Village-Wide Energy Efficient Weatherization and Heating Retrofit Summary:

#### **Total Building Savings All Measures:**

Projected Annual Fuel Savings (gallons): 818
Total Projected Annual Energy Cost Savings: \$4,663¹
Total village wide In-kind contribution: \$1,306
Total project cost including In-kind contributions: \$36,475
Simple Payback (including In-kind contributions): 7.82 years

<sup>1</sup> #2 Heating Fuel Rate [used to calculate heating fuel savings] (AkWarm Library): \$5.70/gal

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## **Community Building**

## Weatherization/Heating Retrofit Summary:







#### **Materials Installed**

Replaced original oil fired boiler with on-demand efficient boiler and efficient space heater Replaced existing man doors with standard pre-hung U-0.16 insulated doors Air seal to reduce air leakage; added insulation Replaced existing windows with U-0.22 vinyl windows

Pre-retrofit energy use: 1,964 gallons
Post-retrofit energy: 1,146 gallons
Annual energy savings projection: 18 gallons
Pre-retrofit to post retrofit energy reduction: 42% percent
Estimated Annual Heating Fuel Cost Savings: \$4,663